#### UTAH OIL AND GAS CONSERVATION COMMISSION WATER SANDS WELL LOG ELECTRIC LOGS

Confidential Status Expired Effective 8-22-91

6/28/90

STATE LEASE NO.

PUBLIC LEASE NO

LAND: FEE & PATENTED DRILLING APPROVED: 7/6/90

SPUDDED IN: COMPLETED:

PUT TO PRODUCING: 8-22-91 LA

INITIAL PRODUCTION: GRAVITY A P.I. GOR

PRODUCING ZONES TOTAL DEPTH

LA'D PER BLM Effective 8-22-91

WELL FLEVATION DATE ABANDONED:

CAVE CANYON

CAVE CANYON

FIFL D UNIT COUNTY

1090

RGE.

24E

DATE FILED

LOCATION

TWP

**38S** 

SAN JUAN

WELL NO

SEC.

3

CAVE CANYON FEDERAL 3-4

FNT. FT. FROM (N) (S) LINE.

OPERATOR

RAYMOND-

780**'** 

Duncan Erirgy Co.

FWL.

FT. FROM (E) (W) LINE

TWP.

API NO. 43-037-31542

RGE

NW NW

U-47876

SEC.

**OPERATOR** 

SUB. REPORT/abd

INDIAN

1/4 - 1/4 SEC.

3



1777 SOUTH HARRISON STREET-PENTHOUSE ONE TELEPHONE (303) 759-3303-DENVER, COLORADO 80210

June 5, 1990

Bureau of Land Management P. O. Box 970 Moab, UT 84532

Re: Cave Canyon No. 3-4
780' FWL & 1090' FNL
NW NW Sec. 3-T38S-R24E
San Juan County, UT

#### Gentlemen:

This letter is to inform you that Permitco is authorized to act as Agent and to sign documents on behalf of Raymond T. Duncan when necessary for filing County, State, and Federal permits including Onshore Order No. 1, Right-of-Way applications, etc., for the above captioned well.

It should be understood that Permitco is acting as Agent only in those matters stated above and is not responsible for drilling, completion, production, or compliance with regulations.

Raymond T. Duncan agrees to accept full responsibility for operations conducted in order to drill, complete, and produce the above captioned well.

Sincerely,

RAYMOND T. DUNCAN

W. J. Falli

W. S. Fallin Production Manager

WSF:kb

STATE OF UTALL
DEPARTMENT OF NATURAL RESOURCES

Other instructions on investe side)

0011 × 0 1550	I VISION OUT	S. S. AND MINNE		5. Lease Designation and Serial No.
				U-47876
APPLIGATION I	FOR PERMIT TO	O DRILL, DEEP	EN, OR PLUG BAC	6. If Indian, Allottee or Tribe Name N/A
DLITT <sup>)</sup> Statebear ومرجودية	<b>√</b>	DEEPEN [	PLUG BACK	7. Unit Agreement Name
b. Type of Well	···			Cave Canyon Unit
Oil XX Gas Well			Single Multiple Zone Zone	Cave Canyon Federal
<del>-</del> -	-759-3303	1777 S. Harri	<b>-</b>	9. Well No.
Raymond T. Du  Address of Operator 303-		Denver, Co. 13585 Jackson	80210 Drive	#3-4
Permitco, Inc			80241	10. Field and Pool, or Wildcat
l. Location of Well (Report	<del>-</del>	ccordance with any Sta	te requirements.*)	Cave Canyon 303
At surface 1090' FN	NL & 780' FWL			11. Sec., T., R., M., or Bik. and Survey or Area
At proposed prod. zone	WNW			Sec. 3 T38S - R24E
14. Distance in miles and dir				12. County or Parrish 13. State
32 Miles	s southeast of			San Juan, Utah
<ol> <li>Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig. line</li> </ol>		16.	No. of acres in lease 17. 1289.44	No. of acres assigned to this well 40
18. Distance from proposed to nearest well, drilling, or applied for, on this less	ocation*	19. :	Proposed depth KAN 20.	Rotary or cable tools Rotary
21. Elevations (Show whether	DF, RT, GR, etc.)			22. Approx. date work will start*
5316 GR				duly 15, 1990
23.	1	PROPOSED CASING AN	ND CEMENTING PROGRAM	
Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
17 1/2 ''	13 3/8''	48#	120'	To Surface 1050 Sx or suffic to circ
12 1/4"	8 5/8"	24,#	1915'	400 Sx or Suffic to Cover
7 7/8"	5 1/2 ''	15.5#	6180'	Zones of interest
productive, concluded and a See On Shore  We realize the sea	asing will be bandoned as pe Order No. 1 at at the above 1 cing rules of	run and the we r BLM and Stat tached.	ell completed. If te of Utah requiren	the Ismay formation. If dry, the well will be ments.
grant approva Sections 3 &	based on topog l of an except 4, T38S R24E.	raphy and siesion to spacing  AM: If proposal is to	Jtah, Division of ( smic considerations g. Raymond T. Dunc deepen or plug back, give data o	and we request that you can is the lessee of all of
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Form OGC-la

### STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES

(Other instructions on reverse side)

	DIVISION OF	OIL, GAS, AND MINING		5. Lease Designation and Serial No. U-47876
APPLICATION	FOR PERA	AIT TO DRILL, DEEP	EN, OR PLUG BA	CK 6. If Indian, Allottee or Tribe Name
a. Type of Work				N/A 7. Unit Agreement Name
DRIL	L XX	DEEPEN	PLUG BACK	
b. Type of Well	- =	•	Circle and the second	Cave Canyon Unit
Oil XX Gal Well XX	ni └ Otl	ner	Single Multiple Zone Zone	
	3-759-3303	1777 S. Harri		Cave Canyon Federal
Raymond T.		Denver, Co. 13585 Jackson	80210	
Address of Operator 30 Permitco, 1			802 4 5 C E	#3-4
	_	20		
At surface		and in accordance with any Stat	J#30	Cave Canyon
1090'	FNL & 780'	FWL	JUN 28 1	390 M. Sec., T., R., M., or Blk.
At proposed prod. zone	NWNW		D.D. v. v.	_ Sec. 3 T38S - R24E
. Distance in miles and		rest town or post office*	DIVISION O	
		st of Monticello, U	tah OIL GAS & MI	NING San Juan, Utah
5. Distance from propose				7. No. of acres assigned
location to nearest property or lease line, (Also to nearest drlg. li	ne, if any)		1289.44	to this well 40
<ol> <li>Distance from proposed to nearest well, drilling or applied for, on this</li> </ol>	r, completed, and	)' Approx.	Proposed depth 20 6180	Rotary or cable tools Rotary
<ol> <li>Elevations (Show wheth 5316 GR)</li> </ol>	er DF, RT, GR, et	c.)		22. Approx. date work will start*
			•	duly 15, 1990
3.		PROPOSED CASING AN	D CEMENTING PROGRAM	
Size of Hole	Size of Casin	g Weight per Foot	Setting Depth	Quantity of Cement
17 1/2 "	13 3/8		120'	To Surface
12 1/4"	8 5/8'	24 <sub>i</sub> ‡	1915'	1050 Sx or suffic to circ
7 7/8''	5 1/2	15.5#	6180'	400 Sx or Suffic to Cover Zones of interest
productive, plugged and See On Shore We realize t with the sp	casing will abandoned a Order No. hat the aba	be run and the we as per BLM and Stat 1 attached. ove location has be s of the State of U	<pre>11 completed. If e of Utah require en staked at non- tah, Division of</pre>	standard footages in accordanc Oil, Gas & Mining. This
location was grant approv Sections 3 &	al of an ex	ception to spacing	mic consideration . Raymond T. Dun	s and we request that you can is the lessee of all of
				on present productive zone and proposed new pro-
Signed Sea	S	TitleR	onsultant for aymond T. Duncan	6/25/90 Date
(This space for Federal	or State office use	)		
Permit No			Approval Date	
Approved by		Title		Date

PERMIT NO. \_\_

APPROVED BY \_

CONDITIONS OF APPROVAL, IF ANY:

SHOWIT DE TEIPLICATE

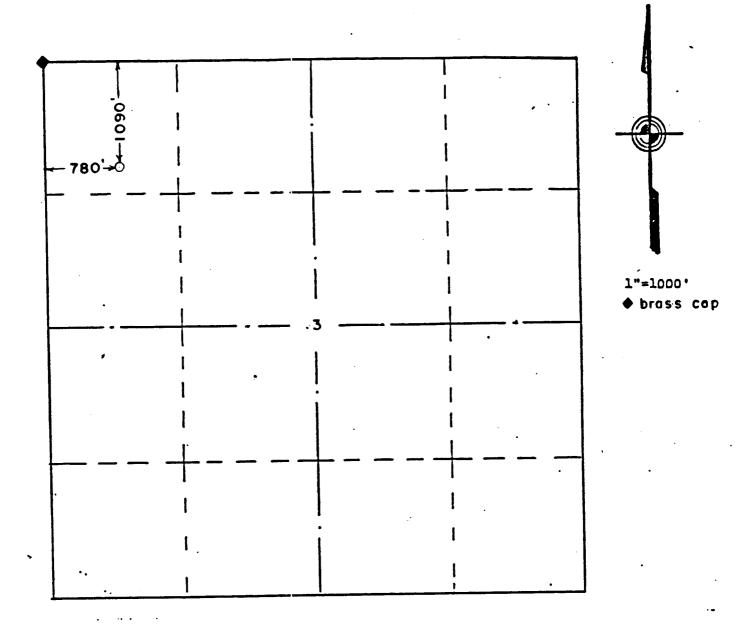
			-nian	rtions on ide)	Budget Bureau No. 1004-0136 Expires August 31, 1985
la. TYPE OF WORK	DIIDEAILAE	OF THE INTE		1	5. LRASS DOGIGNATION AND SERIAL NO.
la. TYPE OF WORK	BUKEAU UF	LAND MANAGEME	ENT		U-47876
	OR PERMIT T	O DRILL, DEE!	PEN, OR PLUG B	ACK	6. EF INDIAN, ALLOTTES OR TRIBE HAME
LIKILL	 • <b>ਹ</b> ਾ	DEEPEN [	PLUG BAC	~r □	N/A 7. UPIT AGREEMENT NAME
b. TYPE OF WELL	ALA!	DEEPEN [	PLUG BA	~ `	Cave Canyon Unit
OIL WELL WELL	OTHER		SINGLE MULTIP		8. PARM OR LEASE NAME
. NAME OF OPERATOR 303			rrison, Penthous	e T	Cave Canyon Federal
Raymond T. Dunc		Denver, Co	lorado 80210		9. WELL NO.
	-452-8888	12585 lack	2000	100	#3-4
Permitco Inc.,	Agent	Denver CM	DECELV		10. PIBLD AND POOL, OR WILDCAT
. LOCATION OF WELL (Report	location clearly and	in accordance with any	atat regulrements.")		Cave Canyon Field
	NL & 780' FV	ıl Ü	JUN 28 199	0	11. SBC., T., R., M., OR BLK. AND SUBVET OR ARRA
at proposed prod. sole	NW NW		Para service as exam		Sec.3 T38S - R24E
4. DISTANCE IN MILES AND I					12. COUNTY OR PARISE   18. STATE
32 miles southe	ast of Montic	ello, Utah	OIL, GAS & MININ	<b>4</b> 6	San Juan Utah
5. DISTANCE PROM PROPOSED® LOCATION TO NEAREST PROPERTY OR LEASE LINE, (Also to Bearest drig. uni	PT. 23	30'	NO. OF ACRES IN LEASE 1289.44	17. NO. O	P ACRE ASSIGNED
8. DISTANCE FROM PROPOSED TO NEAREST WELL, DRILLI OR APPLIED FOR, ON THIS LEA	LOCATIONS NG, COMPLETED, QO	) Approx.	PROPOSED DEPTH 6180		er on Cable Tools
1. BLEVATIONS (Show whether 5316 GR	DF, RT, GR, etc.)			·	July 15, 1990
3.	P	ROPOSED CASING AI	ND CEMENTING PROGRA	M	
SIZE OF ROLE	SIZE OF CASING	WEIGHT PER POOT	SETTING DEPTH		QUANTITY OF CENERT
17 1/2"	13 3/8"	48#	120'	1	Surface
12 1/4"	8 5/8"	24#	1915'	l .	050 Sx or suffic to circ
7 7/8''	5 1/2''	15.5#	6180	40	OU SX or Surric to cover
	ļ		. (190)	! * * b = 1	of interest Ismay formation. If
productive, casi and abandoned as	ng will be ru	un and the wel	l completed. If	dry, t	the well will be plugged
	er No. 1 atta				
See On shore Ord					
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See On shore Ord			:		
See On shore Ord			1 1	•	

#### "See Instructions On Revene Side

TITLE ..







WELL LOCATION DESCRIPTION:

R. T. DUNCAN, Cave Canyon, 3 - 4

. 1090'FNL & 780'FWL

Section 3, T.38 S., R.24 E., SLM

San Juan, UT.

5316' ground elevation

The above plat is true and correct to my know the and

29 May 1990

Gerald G. Budleston NS

ONSHORE OIL & GAS ORDER NO. 1

Approval of Operations on Onshore Federal and Indian Oil and Gas Leases

# CONFIDENTIAL

CAVE CANYON FEDERAL #3-4
1090' FNL and 780' FWL
NW NW Sec. 3, T38S - R24E
San Juan County, Utah

Prepared For:

RAYMOND T. DUNCAN

By:

PERMITCO INC. 13585 Jackson Drive Denver, Colorado 80241 303/452-8888

#### Copies Sent To:

4 - BLM - Moab, Utah

1 - Div. of Oil, Gas & Mining - SIC, Utah

3 - Raymond T. Duncan - Denver, CO



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#### DRILLING PROGRAM

Page 3

## ONSHORE OIL & GAS ORDER NO. 1 Approval of Operations on Onshore Federal and Indian Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Orders, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

1. The surface formation and estimated formation tops to be encountered are as follows:

Formation	Depth	Subsea
Dakota	Surface	
Hermosa Group	<b>47</b> 80 <b>'</b>	+ 549'
Ismay	<b>5765'</b>	- 436'
Upper Ismay Porosity	5794'	- 465'
Lower Ismay	5988'	- 659'
Gothic Shale	6028'	- 6991
Desert Creek	6058'	- 7291
Lower Desert Creek Por.	6105'	- 776'
Chimney Rock Shale	6121'	- 792'
Akah	6147'	- 818'
T.D.	6180'	- 851'

2. The estimated depths at which oil, gas, water or other mineral bearing zones are expected to be encountered are as follows:

Substance	Formation	Anticipated Depth
Oil	Ismav	5765'

All fresh water and prospectively valuable minerals (as described by BIM at onsite) encountered during drilling, will be recorded by depth cased and cemented. All oil and gas shows will be tested to determine commercial potential.



#### DRILLING PROGRAM

#### Page 4

3. Pressure control equipment will consist of a 10", 3000# BOP. (See BOP Diagram attached.)

BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily o ensure good mechanical working order, and this inspection recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs.

#### 4. a. Casing

The proposed casing program is as follows:

Purpose Conductor	<u>Depth</u> 0-120	Hole Size	O.D. 13-3/8"	Wt. 48#	Grade	Туре	or Used New
Surface	0-2075'	12-1/4"	8-5/8"		K-55	ST&C	New
Produc.	0 <del>-6</del> 180'	7-7/8"	5-1/2"	15.5#	K-55	LT&C	New

#### b. Cement

The cementing program will be as follows:

Conductor 0-120'	Type and Amount Sufficient to circulate to surface
<u>Surface</u> 0-1915'	Type and Amount 1050 sx or sufficient to circulate to surface.
Production	Type and Amount 400 sx or - sufficient to cover zones of interest.

Anticipated cement tops will be reported as to depth, not the expected number of sacks.



Non

#### DRILLING PROGRAM

#### Page 5

- c. Auxiliary Equipment will be as follows:
  - 1. Kelly cock.
  - 2. Float above the bit.
  - 3. A sub with a full opening valve will be on the floor when the kelly is not in use.
- 5. Drilling fluid will be as follows:

Interval	Mud Type	Mud Wt.	Visc.	<u>F/L</u> <u>PH</u> 10-20
0-4400'	Natural	9.0 - 9.2	35	10-20 =-
4400-T.D.	Chem. Gel	9.2-9.5	45	10 thru pays

Operations will be conducted in accordance with ONSHORE IL & GAS ORDER NO. 2; DRILLING OPERATIONS, except where advance approval for a variance has been obtained.

- 6. Coring, logging and testing programs are as follows:
  - a. No cores are anticipated.
  - b. The logging program will consist of the following: A Dual Induction will be run from 1915' to T.D. A BHC Acoustic and CNL/FDC will be run from 5600' to T.D.
  - c. No drill stem tests are anticipated.

Whether the well is completed as a dry hole or as a producer, "Well Completion or Recompletion Report and Log" (Form 3160-4) will be submitted to the District Office not later than thirty (30) days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1(b). Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the Moab District Manager.



#### DRILLING PROGRAM

#### Page 6

- 7. Abnormal conditions, bottom hole pressures and potential hazards.
  - a. The maximum bottom hole pressure to be expected is 2200 psi.
- 8. Anticipated Starting Dates and Notifications of Operations
  - a. Raymond T. Duncan plans to spud the Cave Canyon Federal #3-5 on approximately August 1, 1990 and intends to complete the well within approximately one month after the well has reached T.D.
  - b. Required verbal notifications are summarized in Table I, attached. Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the District Office within twenty four (24) hours after spudding. If the spudding occurs on a weekend or holiday, the written report will be submitted on the following regular work day.
  - c. In accordance with Onshore Oil and Gas Order No. 1, this well will be reported on Form 3160-6, "Monthly Report of Operations", starting with the month in which operations commence and continuing each month until the well is physically plugged and abandoned. This report will be filed directly with Minerals Management Service.
  - d. Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported to the Resource Area in accordance with requirements of NTI-3A.
  - e. Should the well be successfully completed for production, the District Manager will be notified when the well is placed in producing status. Such notification will be sent by telegram or other written communication, not later than five (5) business days following the date on which the well is placed on production.
  - f. A first production conference may be scheduled within fifteen (15) days after receipt of the first production report. The Resource Area Office will coordinate the field conference.



San Juan County, Utah

C DENTIAL-TIGHT HOLE

#### DRILLING PROGRAM

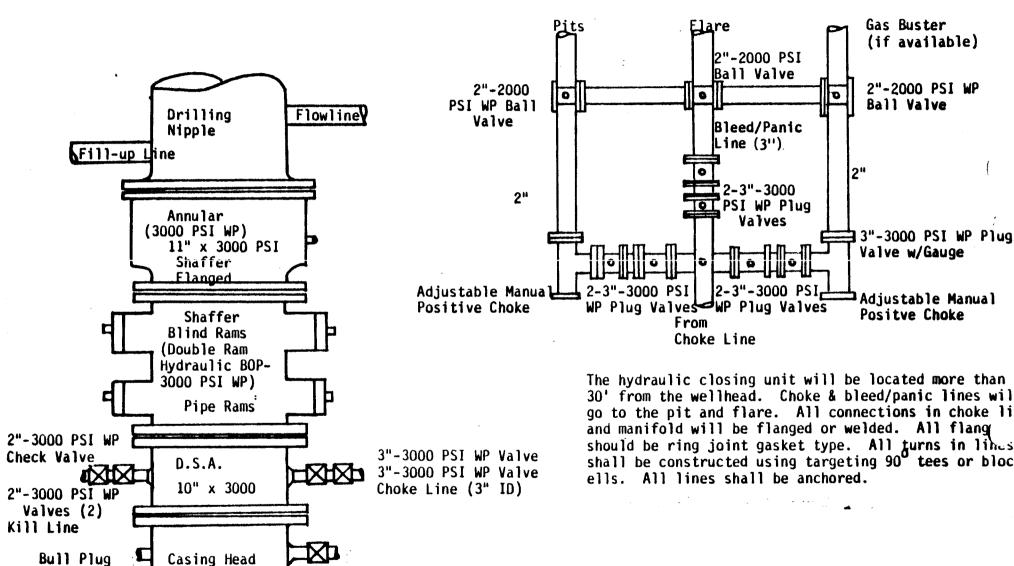
#### Page 7

- g. A Subsequent Report of Abandonment" (Form 3160-5) will be filed with the District Manager within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the Area Manager or his representative, or the appropriate surface managing agency.
- h. Approval to vent/flare gas during initial well evaluation will be obtained from the District Office. This preliminary approval will not exceed 30 days or 50 MMCF gas. Approval to vent/flare beyond this initial test period will require District Office Approval pursuant to guidelines in NTL-4A.
- i. Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6(d) and Onshore Oil and Gas Order No. 2.
- j. The following minimum information will be permanently placed on the marker with a plate, cap, or beaded—on with a welding torch:

Well name and number, location by 1/4 1/4 section, township and range, Lease number and operator.



Surface Casing



2"-3000 PSI WP Valve

The hydraulic closing unit will be located more than 30' from the wellhead. Choke & bleed/panic lines will go to the pit and flare. All connections in choke line and manifold will be flanged or welded. All flang should be ring joint gasket type. All turns in lines shall be constructed using targeting 90° tees or block

#### SURFACE USE PLAN

Page 1

#### Thirteen Point Surface Use Plan

#### 1. Existing Roads

- a. The proposed well site is located 32 miles southeast of Monticello, Utah.
- b. Directions to the location from Monticello are as follows:

From the south edge of town go South on Highway 191 for 11.6 mile. Turn left (east) Alkali #204 (County Road) and proceed east and south for 3.1 miles to a fork in the road. Turn left and continue on Alkali #204 in a southeasterly direction for an additional 15 miles. Turn left (east) onto Perkins Road #206 and proceed 2.0 miles. Turn north onto an existing oilfield road and proceed approximately 1/2 mile. Turn right onto new access (flagged) and proceed an additional 300 feet to the location.

- c. The roads in the area are primarily county roads. See Map #1.
- d. Improvement to the existing access will not be necessary.
- e. All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.
- f. An encroachment permit will be obtained from the San Juan County Road Department, 801/587-2231, ext. 43.

#### 2. Planned Access Roads

- a. There will be approximately 300 feet new access. This access was flagged at the time of staking.
- b. The maximum total disturbed width will be 30 feet.
- c. The maximum grade will be 7%.
- d. No turnouts will be necessary.



#### SURFACE USE PLAN

#### Page 2

- e. One low water crossing will be necessary as shown on Map #1.
  A hard rock bottom exists at the crossing point.
- f. Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance by the surface owner.
- g. The access road (including any existing non-county) road will be brought to Resource (Class III) Road Standards by meeting the minimum design requirements within sixty (60) days of completion of drilling operations.
- h. All topsoil from the access road will be reserved in place.
- 3. Location of Existing Wells Within a 1-Mile Radius of the Proposed Location. (See Map #1).
  - a. Water Wells one
  - b. Injection or disposal wells one
  - c. Producing Wells five
  - d. Drilling Wells none

#### 4. Location of Tank Batteries and Production Facilities.

- a. All permanent structures (onsite for six months or longer) will be painted a neutral, nonreflective, (Juniper Green) color to blend into the surrounding area, except for those required to comply with the Occupational Safety and Health Act (OSHA) or written company safety manual or documents.
- b. If a tank battery is constructed on this location, it will be surrounded by a dike of sufficient capacity to contain 1-1/2 times the storage capacity of the largest tank; all load lines and valves will be placed inside the dike surrounding the tank battery.



#### SURFACE USE PLAN

#### Page 3

- c. All site security guidelines identified in 43 CFR 3162.7-5 and ONSHORE OIL & GAS ONDER NO. 3; SITE SECURITY will be adhered to.
- d. Gas measurement will be conducted in accordance with the ONSHORE OIL & GAS ORDER NO. 5; GAS MEASUREMENT and 43 CFR 3162.7-3.
- e. Gas meter runs for each well will be located within five hundred (500) feet of the wellhead. The gas flowline will be buried from the wellhead to the meter and downstream for the remainder of the pad. Meter runs will be housed and/or fenced.
- f. Oil measurement will be conducted in accordance with <u>ONSHORE</u> OIL & GAS ORDER NO. 4; OIL MEASUREMENT as of the effective date of August 23, 1989 and 43 CFR 3162.7-2.
- g. If the well is productive, the production facilities will be located at a central tank battery located at the Cave Canyon #3-2 in the NE SW Section 3, T38S - R24E, San Juan County, Utah.
- h. Any necessary pits will be properly fenced to prevent any wildlife entry. The production pit will be flagged overhead.

#### 5. Location and Type of Water Supply

- a. All water needed for drilling purposes will be obtained from the Cave Canyon Water Source well located approximately 80 feet SW of the Cave Canyon #3-2 producing well. Other water may be obtained from the Richard Gore Artesian wells.
- b. Water will be trucked to location over the county roads in the area.
- c. No water well is to be drilled on this lease.
- d. Use of water for this operation will approved by obtaining a temporary use permit from the Utah State Engineer, in Price, Utah, 801/637-1303.



#### SURFACE USE PLAN

#### Page 4

e. Water obtained on private land, or land administered by another agency, will require approval from the owner or agency for use of the land.

#### 6. Source of Construction Material

- a. Road surfacing material will be obtained from on-site and in place materials.
- b. The use of materials under BIM jurisdiction will conform to 43 CFR 3610.

#### 7. Methods for Handling Waste Disposal

- a. The reserve pit will be constructed with at least 1/2 of the capacity in cut material and will be lined with 24 tons of bentonite.
- b. Three sides of the reserve pit will be fenced within 24 hours after completion of construction and the fourth side within 24 hours after drilling operations cease with four (4) strands of barbed wire, or woven wire topped with barbed wire to a height of not less than four (4) feet. The fence will be kept in good repair while the pit is drying.
- c. No liquid hydrocarbons (i.e. fuels, lubricants, formation) will be discharged to the reserve pit.
- d. No chrome compounds will be on location.
- e. All trash will be placed in a trash basket and hauled to a county refuge facility as necessary.
- f. Produced waste water will be confined to the reserve pit for a period not to exceed ninety (90) days after initial production. During the 90-day period, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for the District Manager's approval pursuant to NTL-2B.



#### SURFACE USE PLAN

#### Page 5

#### 8. Ancillary Facilities

a. There are no airstrips, camps, or other facilities planned during the drilling of the proposed well.

#### 9. Well Site Layout

- a. See Diagram #1 for rig layout. See Diagram #2 for cross section of drill pad. See Diagram #3 for cuts and fills.
- b. The location of mud tanks; reserve, trash cage; pipe racks; living facilities and soil stockpiles will be shown on Diagrams #1 and #3. The location will be laid out and constructed as discussed during the predrill conference.
- c. The maximum amount of topsoil available will be removed and stockpiled on the north and west sides of the location as shown on Diagram #3.
- d. Access to the well pad will be as shown on Map \$1.

#### 10. Reclamation

- a. Within 24 hours of completion of drilling, the location and surrounding area will be cleared of all remaining debris, materials, and junk not required for production.
- b. As soon as the reserve pit has dried or within eighteen (18) months whichever is least, all areas not needed for production (including access road) will be filled in, recontoured to approximately natural contours and as much topsoil as was removed will be replaced leaving enough for future restoration (unless the well is a dry hole). The remaining topsoil (if any) will be stableized and seeded in place.
- c. The area will be seeded between October 1 and February 28 with:
  - 3 lbs/acre Indian Ricegrass
  - 8 lbs/acre Crested wheatgrass
  - 5 lbs/acre Fourwing saltbush
  - 3 lbs/acre Forage Kochia



#### SURFACE USE PLAN

#### Page 6

Prior to seeding the location will be ripped 12 inches deep and 18 inches apart after recontouring. After broadcasting of seed a light harrow will be dragged over the location the bury the seed. If the seed is drilled, the seeding rate may be 75% of the above rates. Water bars and/or terracing may be required by the Authorized Officer at the time of rehab.

h. The reserve pit and that portion of the location and access road not needed for production and production facilities will be reclaimed.

#### 11. a. Surface Ownership

Bureau of Land Management

b. Mineral Ownership

Bureau of Land Management

#### 12. Other Information

- a. There will be no deviation from the proposed drilling and/or workover program without prior approval from the District Manager. Safe drilling and operating practices must be observed. All wells, whether drilling producing, suspended, or abandoned and/or separate facilities, will be identified in accordance with 43 CFR 3162.6.
- b. "Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.6.
- c. The dirt contractor will be provided with an approved copy of the surface use plan.
- d. An archeological study was conducted by IaPlata Archaeological Consultants. A small arch site was found but can be avoided by the wellpad. Clearance has been recommended. A copy of this report is attached.



#### SURFACE USE PLAN

#### Page 7

- e. A single barbed wire fence will be placed between the location and the arch site prior to construction.
- f. The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the authorized officer (AO). Within five working days the AO will inform the operator as to:
  - whether the materials appear eligible for the National Register of Historic Places:
  - the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and,
  - a time frame for the AO to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.
- g. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.
- h. This permit will be valid for a period of one year from the date of approval. After permit termination, a new application will be filed for approval for any future operations.



#### SURFACE USE PLAN

Page 8

i. If at any time the facilities located on public lands authorized by the terms of the lease are no longer included in the lease (due to a contraction in the unit or other lease or unit boundary change) the BIM will process a change in authorization to the appropriate statute. The authorization will be subject to appropriate rental, or other financial obligation determined by the authorized officer.

#### 13. Lessee's or Operator's Representative and Certification

Permit Matters
PERMITCO INC.
Lisa L. Smith
13585 Jackson Drive
Denver, CO 80241
303/452-8888

Drilling & Completion Matters
RAYMOND T. DUNCAN
1777 S. Harrison St.
Penthouse One
Denver, CO 80210
303/759-3303 (W) 303/733-3604 (H) - John Bettridge

#### Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Raymond T. Duncan and its contractors and subcontractors in conformity with the plan and the term and conditions under which it is approved.

This statement is subject to the provision of 18 U.S.C. 1001 for the filing of a false statement.

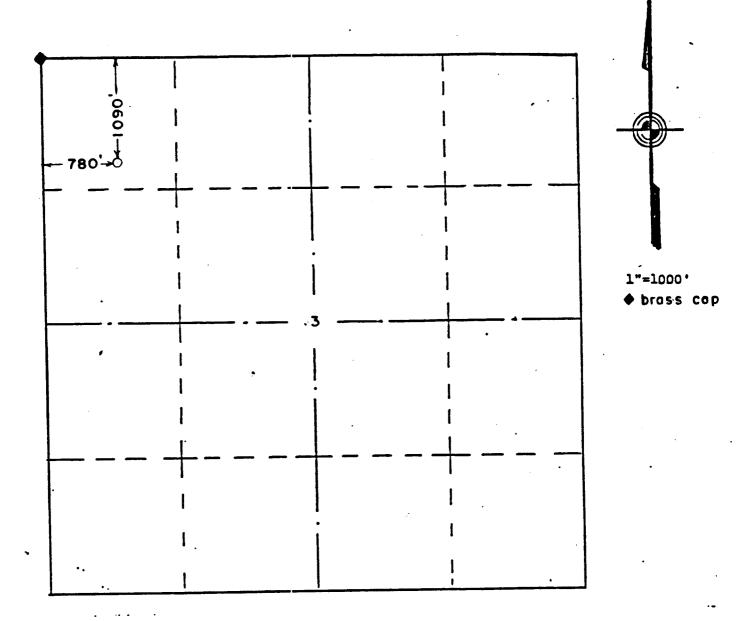
June 26, 1990

Date:

Lisa L. Smith - PERMITCO IN

Authorized Agent for: RAYMOND T. DUNCAN





WELL LOCATION DESCRIPTION:

R. T. DUNCAN, Cave Canyon, 3 - 4

. 1090'FNL & 780'FWL

Section 3, T.38 S., R.24 E., SLM

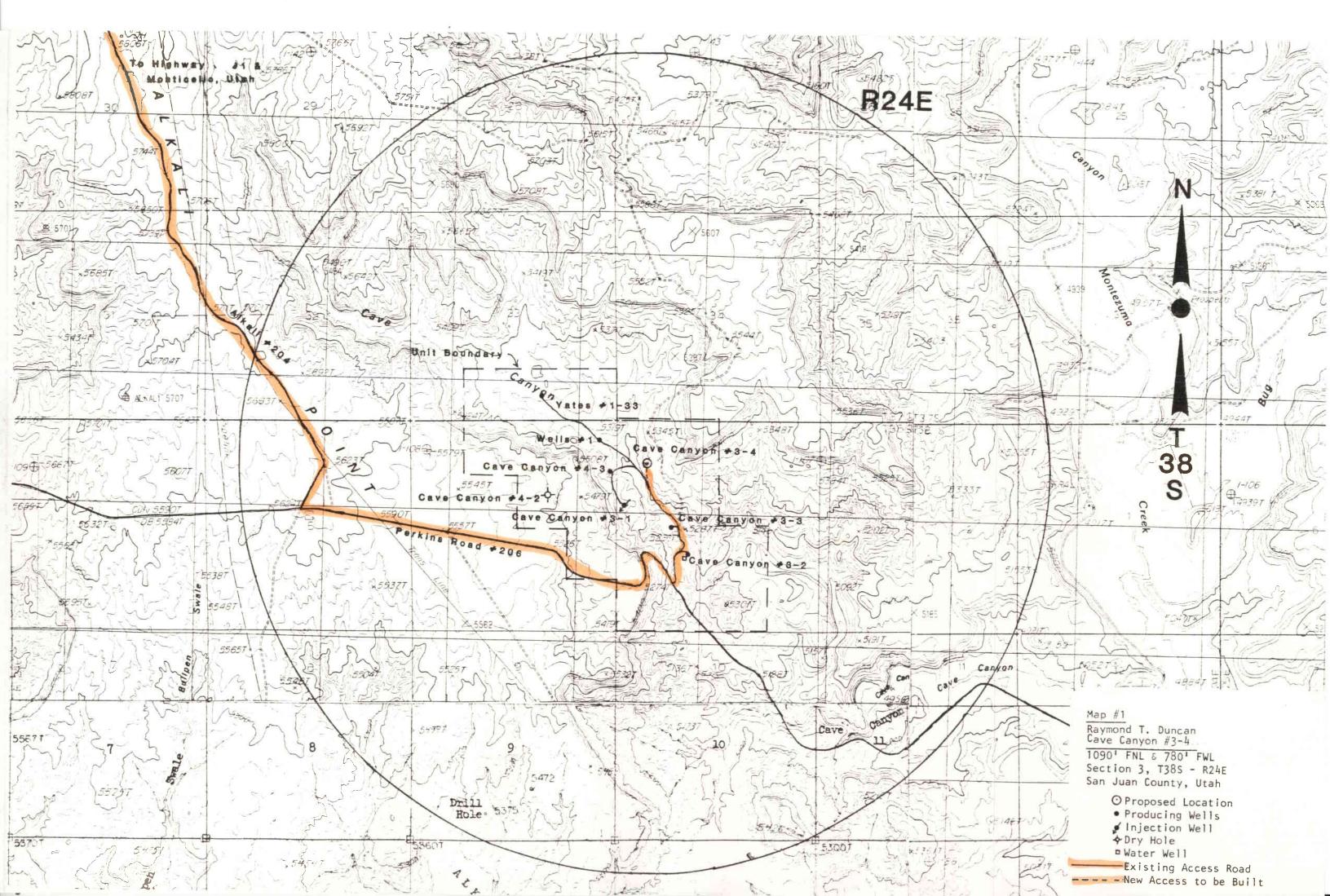
San Juan, UT.

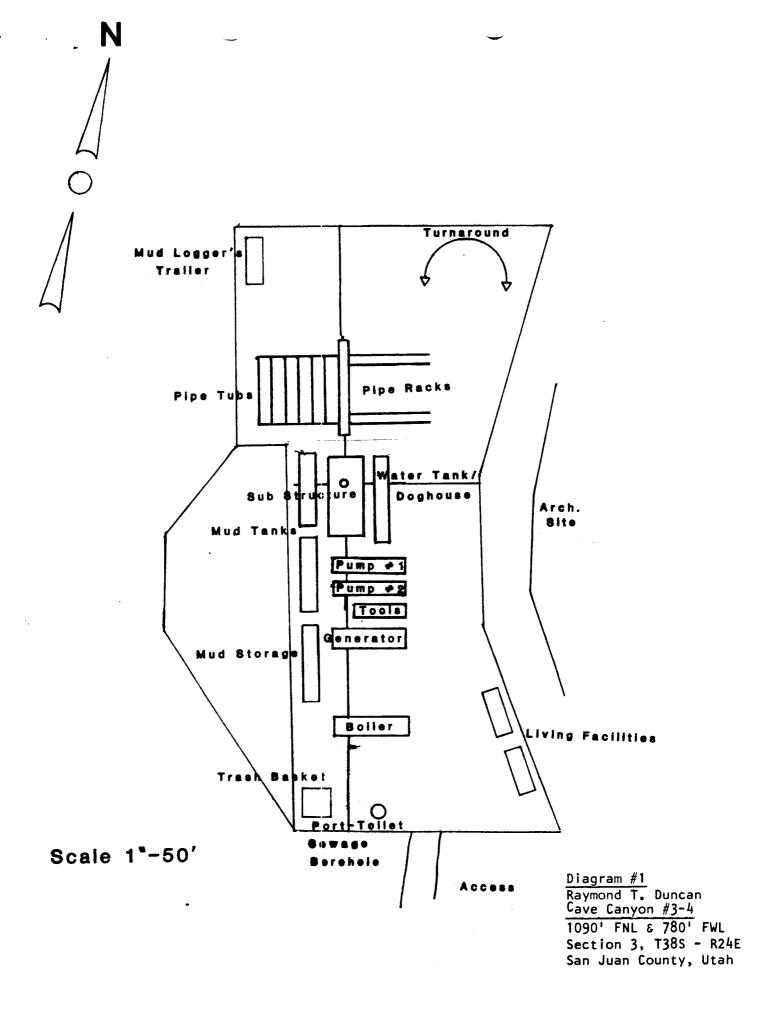
5316' ground elevation

The above plat is true and correct to my know and of the first true and correct to my know and of the first true and correct to my know and of the first true and correct to my know and of the first true and correct to my know and of the first true and correct to my know and of the first true and correct to my know and of the first true and correct to my know and of the first true and correct to my know and of the first true and correct to my know and of the first true and correct to my know and of the first true and correct to my know and of the first true and correct to my know and of the first true and correct to my know and of the first true and correct to my know and of the first true and correct to my know and of the first true and correct to my know and of the first true and correct to my know and of the first true and correct true and co

29 May 1990

Gerald G. hud leston N.S





Cross Section

Diagram #3
Raymond T Duncan
Cave Canyon #3-4
1090 FNL & 780 FWL
Section 3, T38S - R24E
San Juan County, Utah

Cut //// Fill

1"=50' Horz. & Vert.

19.10 0 4

C

c '



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1 an.

# ARCHAEOLOGICAL SURVEY OF RAYMOND T. DUNCAN'S CAVE CANYON FEDERAL 3-4 WELL PAD AND ACCESS ROAD SAN JUAN COUNTY, UTAH

#### LAC REPORT 9076c

By Steven L. Fuller

LA PLATA ARCHAEOLOGICAL CONSULTANTS
P.O. BOX 783
DOLORES, COLORADO 81323
(303) 882-4933

June 4, 1990

FEDERAL ANTIQUITIES PERMIT 89UT57626 UTAH STATE PERMIT U90-LA-218b

Prepared for:

Raymond T. Duncan 1777 South Harrison, Penthouse 1 Denver, Colorado 80210

#### **ABSTRACT**

The archaeological survey of Raymond T. Duncan's Cave Canyon Federal 3-4 well pad and access road was conducted by personnel of La Plata Archaeological Consultants on May 30, 1990. The project is located in San Juan County, Utah on lands administered by the Bureau of Land Management, San Juan Resource Area. A 100 foot wide corridor was surveyed along the 200 foot access road and a 650 by 650 foot area (10 acres) was surveyed surrounding the well center stake. One archaeological site was encountered and recorded on the east edge of the well pad and can be protected during construction; archaeological clearance is recommended for the project.

#### INTRODUCTION

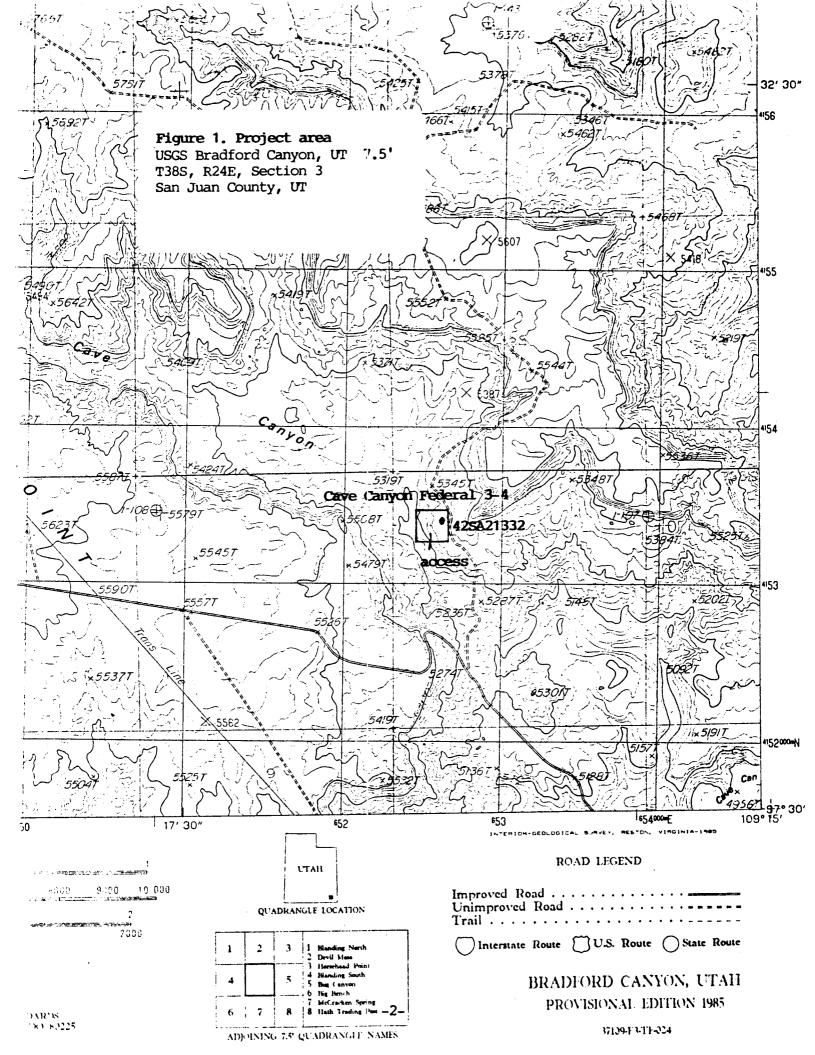
On May 30, 1990 the archaeological survey of Raymond T. Duncan's Cave Canyon Federal 3-4 well pad and access road was conducted by Steven L. Fuller of La Plata Archaeological Consultants. The survey was requested by Ms. Lisa Smith of Permitco, who was acting as a permit agent for Raymond T. Duncan. The well pad and access road are on lands administered by the Bureau of Land Management, San Juan Resource Area and are in San Juan County, Utah.

The project is located in T38S, R24E, Section 3, NW 1/4 NW 1/4. The project is included on the USGS Bradford Canyon, Utah (1985 provisional) 7.5' series topographic map (Figure 1). The project will involve construction of a well pad which will measure about 300 by 230 feet, and about 200 feet of access road which will extend from an existing oilfield road to the southwest. A total of 10.5 acres were examined for this project. A single site, 42SA21332, was encountered and recorded to the east of the proposed well location. Through modification of the pad and fencing, the site can be protected during construction.

#### PHYSIOGRAPHY AND ENVIRONMENT

The project area is located in Cave Canyon, on a canyon slope to the east of the bottom of the canyon bottom. Just to the east of the location, the topography flattens on a bench that extends back to the canyon wall to the east. Soils are formed on a shallow, cobbley colluvium and sandstone boulders and outcrops are exposed to the north and east of the survey area. Vegetation consists of grasses, snakeweed, shadscale, narrow leaf yucca with sparse pinyon and juniper to the northeast on sandstone outcrops and ridges.

The present land use pattern includes livestock grazing and oil and gas development. The closest water sources are probably springs and seeps in Cave Canyon.



#### SURVEY PROCEDURES

The official file search was conducted with the BLM files located in the San Juan Resource Area Office on May 29, 1990. This search indicated that numerous archaeological surveys have been conducted in the vicinity of the project area, primarily several well pad surveys conducted by La PLata for Raymond T. Duncan and several seismic line surveys conducted by AERC, DCA, and La Plata during the early and mid-1980s. The nearest previously recorded site, 42SA16648, was recorded by La Plata for a Duncan well pad and is located almost 1000 feet south of the survey area.

The on-the-ground survey consisted of walking a zigzag transect down one side of the access road centerline and returning down the opposite side. A total width of 100 feet was covered with transect spacing averaging 50 feet or about 15 m. The proposed alignment was flagged during the final archaeological survey. Parallel pedestrian transects spaced about 15 m apart were used to cover the 650 by 650 foot (10 acre) area surrounding the well center stake.

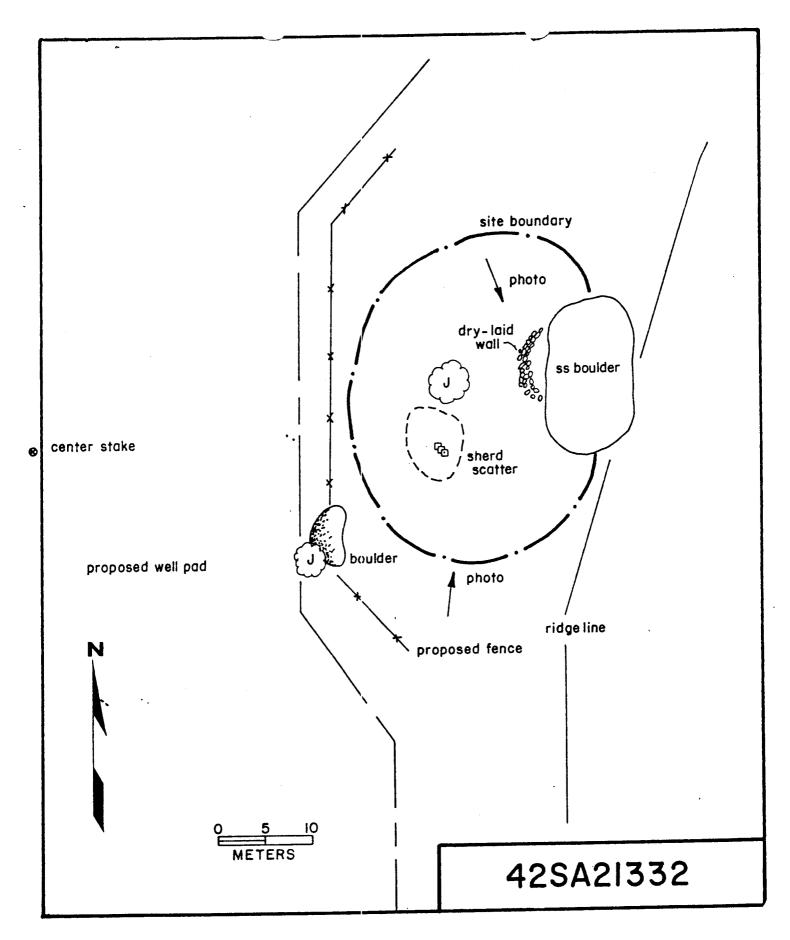
The access road and well pad together contain a total of 10.5 acres which were inventoried for cultural resources for this project. All acreage is administered by the Bureau of Land Management, San Juan Resource Area.

#### **SURVEY RESULTS**

One archaeological site was encountered and recorded on the east edge of the well pad and consists of a Pueblo III activity area or temporary habitation. The site may contain additional information on the prehistory of this area and is considered potentially eligible for nomination to the National Register of Historic Places. The site is described as:

• Site Number: 42SA21332

Description: The site consists of a dry-laid wall that extends around the base of a sandstone boulder, forming an enclosed area (Figure 2). The wall is about 7 m long and arc-shaped and may have served to enclose a granary or temporary living space. The wall fall measures about 30-50 cm in height. Associated with the wall is a light sherd scatter that extends downslope to the west. Within the scatter are two Mesa Verde Black-on-white bowl sherds and about 15 late Pueblo whether sherds. No flaked lithic or nonflaked lithic items were noted. The site is a probable Pueblo III limited activity locus or temporary habitation.



Fi.gure 2

#### CONCLUSIONS AND RECOMMENDATIONS

The archaeological survey for Raymond T. Duncan's Cave Canyon Federal 3-4 access road and well pad was conducted on May 30, 1990 by personnel of La Plata Archaeological Consultants. The project is located on lands administered by the Bureau of Land Management, San Juan Resource Area. The one site encountered in the well pad survey block is on the east edge of the proposed well location and a fence, as indicated on Figure 2, is recommended in order to limit construction disturbance in this area. Archaeological clearance is recommended for the project if site 42SA21332 can be protected during construction.

## CONFIDENTIAL-

OPERATOR Raymond of Duncan NOSBO DATE 6-08-90
WELL NAME Carle Caryon Adual 3-4
SEC HUHW 3 T 385 R ONLE COUNTY Lan Tuan
13-037-31540 tidual API NUMBER TYPE OF LEASE
CHECK OFF:
PLAT BOND NEAREST WELL
LEASE FIELD POTASH OR OIL SHALE
Exception Cocation no other owner within 400 radius
APPROVAL LETTER:
SPACING: R615-2-3 Carle Caryon R515-3-2
CAUSE NO. & DATE R615-3-3
1-Auds mater punit

Governor
Dee C. Hansen
Executive Director
Dianne R. Nielson, Ph.D.
Division Director
Division Director

July 6, 1990

Raymond T. Duncan 1777 S. Harrison Street Denver, Colorado 80210

#### Gentlemen:

Re: Cave Canyon Fed. 3-4 - NW NW Sec. 3, T. 38S, R. 24E - San Juan County, Utah 1090' FNL, 780' FWL

Approval to drill the referenced well is hereby granted in accordance with Section 40-6-18, Utah Code Annotated, as amended 1983; and predicated on Rule R6I5-2-3, Oil and Gas Conservation General Rules, subject to the following stipulation:

1. Prior to commencement of drilling, receipt by the Division of evidence providing assurance of an adequate and approved supply of water as required by Chapter 3, Title 73, Utah Code Annotated.

In addition, the following actions are necessary to fully comply with this approval:

- 1. Spudding notification within 24 hours after drilling operations commence.
- 2. Submittal of an Entity Action Form within five working days following spudding and whenever a change in operations or interests necessitates an entity status change.
- 3. Submittal of the Report of Water Encountered During Drilling, Form 7.
- 4. Prompt notification if it is necessary to plug and abandon the well. Notify John R. Baza, Petroleum Engineer, (Office) (80I) 538-5340, (Home) 298-7695, or Jim Thompson, Lead Inspector, (Home) 298-9318.
- 5. Compliance with the requirements of Rule R6I5-3-20, Gas Flaring or Venting, Oil and Gas Conservation General Rules.

Page 2 Raymond T. Duncan Cave Canyon Fed. 3-4 July 6, 1990

- 6. Prior to commencement of the proposed drilling operations, plans for facilities for disposal of sanitary wastes at the drill site shall be submitted to the local health department. These drilling operations and any subsequent well operations must be conducted in accordance with applicable state and local health department regulations. A list of local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of General Sanitation, telephone (80I) 538-6121.
- 7. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-037-31542.

Sincerely,

Associate Director, Oil & Gas

tas

Enclosures

cc: Bureau of Land Management

J. L. Thompson

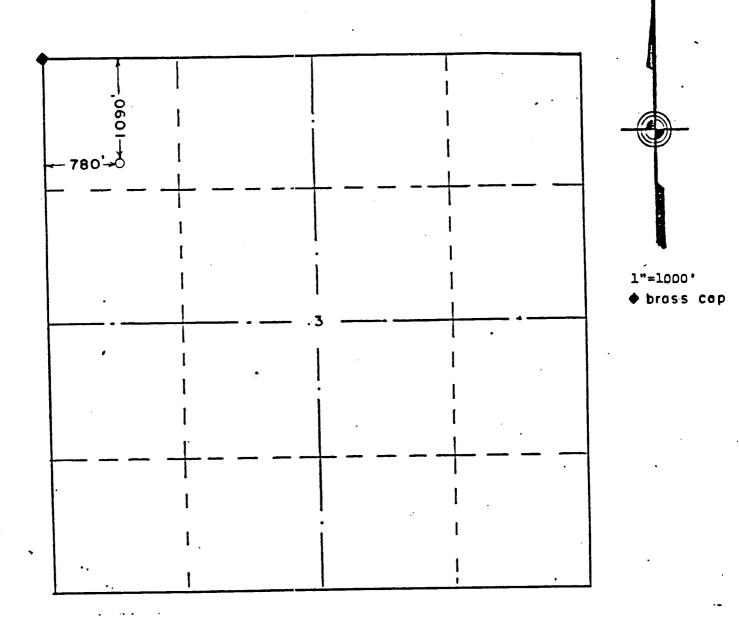
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form OGC-1a	_	·· <b>-</b> · ·	(Other instruc	etions on
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		NATURAL RESOURCE	S CONTROLL	10 11
	DIVISION OF OIL	., GAS, AND WINING		5. Lease Designation and Serial No.
				U-47876
APPLICATIO	N FOR PERMIT	TO DRILL DEEPE	N, OR PLUG BA	6. If Indian, Allottee or Tribe Name
a. Type of Work		AUG '	J 6 199U	N/A
	IIL XX	DEEPEN 🗌	PLUG BACK	7. Unit Agreement Name
b. Type of Well	X <del>IX</del> 1	DIVIS	SIUN OF	Cave Canyon Unit
oil <b>⊠X</b>	Gas Well Other		Some Multiple	_
	03-759-3303	1777 S. Harris	on St. PH 1	Cave Canyon Federal
Raymond T.	• • • • •	Denyer, Co. 8	0210	9. Well No.
. Address of Operator		13585 Jackson		#3-4
	Inc. Agent	Denver, Co. 8	30241	10. Field and Pool, or Wildcat
Location of Well (Re	port location clearly and	in accordance with any State	requirements.*)	Cave Canyon
At surface	FNL & 780' FW			11. Sec., T., R., M., or Bik. and Survey or Area
At proposed prod, zon	NWNW			Sec. 3 T38S - R24E
	d direction from nearest			12. County or Parrish 13. State
32 M	les southeast	of Montic∈llo, Ut	ah	San Juan, Utah
<ol> <li>Distance from prop location to nearest property or lease lin (Also to nearest drls</li> <li>Distance from prop</li> </ol>	ne, ft. 230 'c. line, if any)	,	1289.44	. No. of acres assigned to this well 40  . Rotary or cable tools
to nearest well, dril or applied for, on th	ling, completed, 900'	Approx.	6180'	Rotary
21. Elevations (Show wh	ether DF, RT, GR, etc.)			22. Approx. date work will start*
5316 GR				July 15, 1990
23.		PROPOSED CASING ANI	CEMENTING PROGRAM	
Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
17 1/2 "	13 3/8"	48#	120'	To Surface
12 1/4"	8 5/8"	24;1	1915'	1050 Sx or suffic to circ
7 7/8"	5 1/2 "	15.5#	61801	400 Sx or Suffic to Cover Zones of interest
productive plugged an See On Sho	, casing will be abandoned as re Order No. 1	e run and the we per BLM and State attached.	ll completed. If e of Utah require en staked at non-	t the Ismay formation. If dry, the well will be ments.  standard footages in accordance oil, Gas & Mining. This

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

Sirnel Dia & Smile	Consultant for Raymond T. Duncan	6/25/90 Date
(This space for Federal or State office use)		
Permit No	Approval Date	
Approved by Conditions of approval, if any:	Title	

N



WELL LOCATION DESCRIPTION:

R. T. DUNCAN, Cave Canyon, 3 - 4

. 1090'FNL & 780'FWL

Section 3, T.38 S., R.24 E., SLM

San Juan, UT.

5316' ground elevation

The above plat is true and correct to my know and of the state of the

29 May 1990

Gerald G. Russleston, N.

12 F . 1/2--- -- Augnus - Correr Colorado 81321 - 303-565-3330

Raymond T. Duncan
Well No. Cave Canyon Federal 3-4
NWNW Sec. 3, T. 38 S., R. 24 E.
San Juan County, Utah
U-47876

### CONDITIONS OF APPROVAL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be advised that Raymond T. Duncan is considered to be the operator of the above well and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by BLM Bond WY0271 (Principal - Raymond T. Duncan) via surety consent as provided for in 43 CFR 3104.3.

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR 3106.7-2 continuing responsibility are met.

### A. DRILLING PROGRAM

All lease operations will be conducted in full compliance with applicable regulations (43 CFR 3100), Onshore Oil and Gas Order No. 1, Onshore Oil and Gas Order No. 2 and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions and the approved plan will be made available to the field representative to insure compliance.

- 1. If unconsolidated rock is encountered, conductor shall be set ten (10) feet unto underlying bedrock with cement circulated to surface.
- 2. Surface casing shall be set at least 50 feet into the Chinle Formation regardless of the depth the Chinle is encountered.

If a replacement rig is needed for completion operations, a Sundry Notice (Form 3160-5) to that effect will be filed for prior approval from the District Office, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig. In emergency situations, verbal approval to bring on a replacement rig will be approved through the District Office.

### B. STIPULATIONS

1. In order to protect important deer winter range; exploration, drilling, and other development activity will be allowed only during the period from April 1 to November 30. Exceptions to this limitation in any year may be specifically authorized in writing by the District Engineer, Geological Survey, with the concurrence of the District Manager, Bureau of Land Management.

### NOTIFICATIONS

Notity	Mike Wad	e	or the .		San	Juan	Resource	e Area,	aı
(801)	587-2141	_for the fo	llowing:						
2	days prior	to commend	ement of	dirt	work,	constructio	n or re	clamati	on;

I day prior to spudding;

1 day prior to running and cementing surface casing;

1 day prior to pressure testing of BOPE and/or surface casing.

Notify the Moab District Office, Branch of Fluid Minerals at (801) 259-6111 for the following:

No well abandonment operations will be commenced without the prior approval of the Assistant District Manager, Mineral Resources. In the case of newly drilled dry holes, and in emergency situations, verbal approval can be obtained by calling the following individuals, in the order listed:

Office Phone: (801) 259-6111 Dale Manchester, Petroleum Engineer

> Home Phone: (801) 259-6239

Office Phone: (801) 259-6111 Eric Jones, Petroleum Engineer

> Home Phone: (801) 259-2214

If unable to reach the above individuals including weekends, holidays, or after hours, please call the following:

Lynn Jackson, Chief, Branch of Fluid Minerals

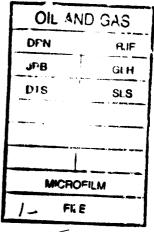
Office Phone: (801) 259-6111

(801) 259-7990 Home Phone:

24 HOURS ADVANCE NOTICE IS REQUIRED FOR ALL ABANDONMENTS.

CONFIDENTIAL -- TIGHT HOLE PLICATE. BUBMIT IN Form approved. Form 3160-3 (Other instructions on reverse side) Budget Bureau No. 1004-0136 (November 1983) UNITED STATES Expires August 31, 1985 (formerly 9-331C) DEPARTMENT OF THE INTERIOR 5. LEASE DESIGNATION AND SERIAL NO. BUREAU OF LAND WANAGEMENT U-47876 6. IF INDIAN, ALLOTTES OR TRIBE NAME PLUG BACK DEEPEN APPLICATION FOR PERMIT 👯 N/A DEEPEN | 1a. TYPE OF WORK 7. UNIT AGREEMBNT NAME PLUG BACK DRILL XX Cave Canyon Unit b. TIPE OF WELL O'MISION CEINGLE MULTIPLE S. PARM OR LEASE NAME WELL XX 1777 S. Harrison, Penthouse I 2. NAME OF OPERATOR 303-759-3303 Cave Canyon Federal 80210 Denver, Colorado O. WELL NO. Raymond T. Duncan 8. ADDRESS OF OPERATOR 303-452-8888
Permitco Inc., Agent #3-4 13585 Jackson Drive 10. PIBLD AND POOL, OR WILDCAT 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*) Cave Canyon Field At BULLECE 11. SSC., T., R., M., OR BLK. AND SURVEY OR AREA 1090' FNL ε 780' FWL At proposed prod. sone NW NW 43 - 027 - 2 15 42

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE® Sec.3 T38S - R24E 12. COUNTY OR PARISH | 18. STATE 32 miles southeast of Monticello, Utah Utah San Juan 17. NO. OF ACRES ASSIGNED TO THIS WELL 40 15. DISTANCE PROM PROPOSED\* 16. NO. OF ACRES IN LEASE LOCATION TO NEAREST PROPERTY OR LEASE LINE, PT. (Also to nearest drig, unit line, if any) 1289.44 2301 18. DISTANCE FROM PROPOSED LOCATIONS
TO NEAREST WELL, DRILLING, COMPLETED, 9001 Approx.
OR APPLIED FOR, ON THIS LEASE, FT. 19. PROPOSED DEPTH 20. ROTARY OR CABLE TOOLS Rotary 21. ELEVATIONS (Show whether DF, RT, GR, etc.) 5316 GR 22. APPROX. DATE WORK WILL START July 15, 1990 23. PROPOSED CASING AND CEMENTING PROGRAM QUANTITY OF CEMENT SETTING DEPTH WEIGHT PER POOT SIZE OF BOLE BIZE OF CABING



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IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive sone and proposed new productive sone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any. Consultant for 6/26/90 (This space for Federal or State office use) APPROVAL DATE JUL 3 1 1990 Assistant District Manager for Minerals FLARING OR VENTING OF COND GAS IS SUBJECT TO NTL 4-A Dated 1/1/80

"See Instructions On Reverse Side

#### **DUNCAN ENERGY COMPANY**

PENTHOUSE ONE

1777 SOUTH HARRISON STREET

DENVER, COLORADO 80210-3925

TELEP HONE (303) 759-3303

FAX (303) 757-0252



January 21, 1991

Bureau of Land Management P.O. Box 970 Moab, Utah 84532

DIVISION OF OIL, GAS & MINING

#### Gentlemen:

Enclosed please find sundry notice for the change of operatorship from Raymond T. Duncan to Duncan Energy Company for the Cave Canyon Lease Waterflood.

If you require further data please contact Marie O'Keefe of this office.

Sincerely,

Marie O'Keefe

Engineering Technician

/mo

cc: State of Utah

3 Triad Center #350

Salt Lake City, UT 84180-1203

Effective 6-21-90 per Marie O'Keelefie Form 3160-5 (June 1990)

### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Expires: March 31, 1993

5. Lease Designation and Serial No.

FORM APPROVED Budget Bureau No. 1004-0135

	BUREAU OF	LAND MA	MAGEM	EN I	5	U-47876	al No.
SUND	SUNDRY NOTICES AND REPORTS ON WELLS					b. If Indian, Allottee or Tribe	Name
				reentry to a different reserve		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Use "API	PLICATION F	OR PERMIT	—'' for s	hep blobbesses 15/11/12	1113	NA	
	SUBM	T IN TRIP	ICATE		8 3 E 4	7. If Unit or CA, Agreement	•
1. Type of Well				1813 INN 0 0 1001	F 301	ave Canyon Leas aterflood	3e
Oil Gas	See Bel	ow		1513 JAN 23 1991	<u>i</u>	Well Name and No.	
2. Name of Operator	:r			DIVISION OF	°	See Below	
Raymond T. Duncan				CIL. GAS & MINING	9.	API Well No.	
3. Address and Telephone No.			i Patitul ad	OIL, UNG & Marrier		See Below	
1777 S. Harrison	St. P-1 De	nver. CO	8021	0 303-759-3303	10	). Field and Pool, or Explora	tory Area
4. Location of Well (Footage, Sec., T.,			. 0023			Cave Canyon Is	smay
See Below					11	. County or Parish, State	
see pelow						San Juan, Utah	ı
12. CHECK APPRO	PRIATE BOX	(s) TO INE	DICATE	NATURE OF NOTICE, RI	EPORT,	OR OTHER DATA	Α
TYPE OF SUBMISS	SION .			TYPE OF AC	TION		
Notice of Intent				bandonment		Change of Plans	
			[] <sub>R</sub> ,	ecompletion		New Construction	
Subsequent Report			∏ PI	ugging Back		Non-Routine Fracturing	
			<u> </u>	asing Repair		Water Shut-Off	
Final Abandonment	Notice			Itering Casing		Conversion to Injection	
			[X] O	<sub>ther</sub> Change of Operato		Dispose Water (Note: Report results of multiple of	ameleriae as Well
13. Describe Proposed or Completed Ope		<u> </u>				Completion or Recompletion Repo	ort and Log form.)
Raymond T. Duncan w	as the pre	vious op	erator	of the Cave Canyon l I for the Cave Canyon			uncan Offices,
personnel and all o	perations	will con	tinue t	to be the same for Du	incan l	Energy Company	
were for Raymond T. of the lease for op WELL NAME	Duncan. erations c	Duncan E	nergy (	Co. is responsible un	nder tl	he terms and co	onditions
Cave Canyon 3-2	T38S R24E	Sec 3	NESW	Producing Oil Well		43-037-31120	
Cave Canyon 4-3	11 11	'' 4	NENE	11 11 11	÷	43-037-31414	
Cave Canyon 3-3	11 11	" 3	SENW	Shut in Oil Well		43-037-31413	
Wells Federal 1-4	11 ti	" 4	NENE	Producing Oil Well		43-037-31028	
Cave Canyon 3-1		11 3	SWNW	Water Injection We	11	43-037-31095	
1-Cave Canyon WSW	11 11		NESW	Water Supply Well	1. 2	43-037-99998,	,
Cave Canyon 4-4 Cave Canyon 12-3	11 11	4	NENE	Producing Oil Well		43-037-31539	
Cave Canyon 12-3	11 11	2	SWNW NWSW	Completing Oil Wel		43-037-31567	
Cave Canyon 3-4	11 11	" 3 " 3	NWNW	Approved Drlg Loca	tion	43-037-31570 43-037-31542	
Cave Canyon 3-5	11 11	" 3	NWSE	11 11 11	1	43-037-31541	
14. I hereby certify that the foregoing is	true and correct					_	
Signed	alle	т	itle Prod	uction Manager		Date January	21, 1991
(This space for Federal or State office	ce use)		<del>-</del>				- · · · · · · · · · · · · · · · · · · ·
Approved by		т	itle			Date	
Conditions of approval, if any:					•		

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Form 3160-5 (June 1990)

## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

UTU40751 SUNDRY NOTICES AND REPORTS ON WELLS 6. If Indian, Allottee or Tribe Name Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT-" for 7. If Unit or CA, Agreement Designation SUBMIT IN TRIPLICATE Cave Canyon Lease 1. Type of Well Waterflood X Oil Well 8. Well Name and No. Other 2. Name of Operator DIVISION OF Cave Canyon Fed. 1-33 9. API Well No. Raymond T. Duncan CIL. GAS & MINING 43-037-31276 3. Address and Telephone No. \_ 1777 S. Harrison St. P-1 Denver, CO 80210 303-759-3303 10. Field and Pool, or Exploratory Area 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Cave Canyon Ismay 11. County or Parish, State T37S R24E Sec 33 SWSE San Juan, UT

FORM APPROVED

Budget Bureau No. 1004-0135

Expires: March 31, 1993

5. Lease Designation and Serial No.

Conversion to Injection

\_\_\_ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion or Recompletion or Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Altering Casing

Other Change of Operator

Raymond T. Duncan was the previous operator of the referenced well. Duncan Energy Company is now the operator of record. Offices, personnel and all operations will continue to be the same for Duncan Energy Company as they were for Raymond T. Duncan. Duncan Energy Company is responsible under the terms and conditions of the lease for operations conducted on the leased lands. This referenced well is in the Cave Canyon Lease Waterflood.

cc: State of Utah

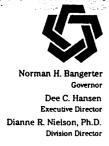
Final Abandonment Notice

4. I hereby certify that the foregoing is true and correct Signed	Tide Production Manager	Date January 21, 1991
(This space for Federal or State office use)		
Approved by	Title	. Date

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

### Division of Oil, Gas and Mining PHONE CONVERSATION DOCUMENTATION FORM

[]	Well File  (Location) SecTwpRng (API No.)	(Return Date) (To - Initials)	MAXOther OPERATOR CHANGE FILE.
1.	Date of Phone Call: 1-28-91	Time: <sup>10</sup> :	00
2.	DOGM Employee (name) L. F Talked to:	ROMERO	্র (Initiated Call শ্ব)
	NameMARIE O'KEEFE	_ (Initiated Call []) - Pho	ne No. (303)759-3303
	of (Company/Organization)	NCAN ENERGY COMPANY/N3370	
3.	Topic of Conversation:EFFECTIV	/E DATE OF OPERATOR CHANGE	
4.	Highlights of Conversation: EFFE REQUIRED FROM RAYMOND T. DUNCAN		
	ONE IN THE SAME COMPANY).		<u> </u>
		•	



# State of Utah DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203 801-538-5340

January 30, 1991

PH 1, 1777 S. Harrison St. Denver, Colorado 80210

Gentlemen:

RE: <u>Transfer of Authority to Inject - Cave Canyon #3-1 Well, Sec. 3, T. 38S, R. 24E - San Juan County, Utah</u>

The Division has received a request of operator change for the Cave Canyon #3-1 Well, from Raymond T. Duncan to Duncan Energy Company.

Please complete and return to our office the enclosed UIC Form 5, as required by R615-8-21 of the Oil and Gas Conservation General Rules.

If I can be of assistance, please contact me at (801)538-5340.

Sincerely,

Gil Hunt UIC Manager

lr Enclosure

OPERATOR CHANGE					Routing:
	tation received by the divisi d item when completed. Write				2- DAS D T S 3- VLC
⊠xChange of Ope □ Designation o	erator (well sold) of Operator	_	ion of Agent Name Change C	)n 1 y	5- RWM 6- LCR Ye
The operator of	the well(s) listed bel	low has changed	(EFFECTIVE DA	TE: <u>6-21-90</u>	)
	DUNCAN ENERGY COMPAN PH 1, 1777 S. HARRIS DENVER, CO 80210		· · · · · · · · · · · · · · · · · · ·	or) DUNCAN, RAY SS) 1777 S. HAI DENVER, CO	RRISON ST., PH 1
	phone <u>( 303) 759–330</u> account no. <u>N</u> 3370	3		phone ( 303 account no.	
<b>Hell(s)</b> (attach a	additional page if needed):				
Name: CAVE CYN Name: WELLS FED Name: PAVE CANY Name: CAVE CANY Name: CAVE CANY		731414 Entity 731413 Entity 731028 Entity 731095 Entity 731539 Entity	: 9775 Sec 4 : 9775 Sec 3 : 9775 Sec 4 : 9775 WIWSec 3 : 9775 Sec 4	_Twp <u>38s</u> Rn <u>g24E</u>	Type: <u>U-478</u> 76  Lease Type: <u>U-478</u> 76
OPERATOR CHANGE	DOCUMENTATION				
) 14 1. (Rule R6 operator	615-8-10) Sundry or o (Attach to this form).	ther <u>legal</u> doc ( <i>Lec. 1-23-91</i> )	cumentation ha	s been receiv	ed from <u>former</u>
2. (Rule R6 (Attach	15-8-10) Sundry or other to this form). (Rec. 1-23-	er <u>legal</u> docume	ntation has be	en received fr	om <u>new</u> operator
operating	rtment of Commerce has g any wells in Utah. w company file number:	Is company reg	istered with	perator above i the state? (ye	s not currently s/no) <u>Yes</u> If
(attach comments	dian and Federal Hells Telephone Documentation section of this form should take place prion	on Form to th . Management m	is report). review of <mark>Fed</mark> e	Make note of eral and India	BLM status in
	have been entered in th bove.(1-31-91)	he Oil and Gas	Information Sy	/stem (Wang/IBM	) for each well
Ich 6. Cardex f	ile has been updated fo	or each well li	sted above.		
Jet 7. Well file	e labels have been upda	ited for each we	ell listed abo	ve.	
for disti	have been included on ribution to State Lands	the monthly "O and the Tax Co	perator, Addre ommission.	ss, and Accoun	t Changes" memo
9. A folder	has been set up for t	the Operator Change and	ange file, and	a copy of thi	s page has been

Division of Dil, Gas and OPERATOR CHANGE HORK	Mining (SHEET	(PAGE 2		Routing:
	received by the division received by the division received when completed. Write N/A i	-	le.	1- 2- 3- 4-
⊠xChange of Operator □ Designation of Ope		□ Designation of <i>F</i> □ Operator Name Ch		5- 6-
The operator of the	well(s) listed below h	as changed (EFFECT	IVE DATE:	)
TO (new operator) DU (address)	JNCAN ENERGY COMPANY	FROM (former	operator) DUNCAN, RAY (address)	YMOND T.
عين ۾ بيان ان ايال <mark>غرير عالم عالم ان دار عالم عالم عالم عالم عالم عالم عالم عالم</mark>	none ( ) count no. N 3370  nnal page if needed):		phone ( account no	) N 0360
Name: CAVE CANYON FED 3 Name: CAVE CYN FED 3 Name: CAVE CANYON #1 Name: CAVE CANYON #1 Name: CAVE CANYON 1 Name: CAVE CANYON 1		Entity: Entity:	Sec 3 Twp 385Rng 24E L Sec 3 Twp 385Rng 24E L Sec 3 Twp 385Rng 24E L Sec 33 Twp 375Rng 24E L Sec 3 Twp 385Rng 24E L Sec Twp Rng L Sec Twp Rng L	.ease Type: <u>U-478</u> 76, .ease Type:
OPERATOR CHANGE DOCU	MENTATION	•		
1. (Rule R615-8- operator (Att	-10) Sundry or other ach to this form).	<u>legal</u> documentat	ion has been receiv	ed from <u>former</u>
2. (Rule R615-8- (Attach to th	10) Sundry or other <u>le</u> is form).	gal documentation	has been received fr	om <u>new</u> operator
operating any	t of Commerce has been wells in Utah. Is copany file number:	ompany registered	new operator above i with the state? (ye	s not currently s/no) If
(attach Telep comments sect	and Federal Hells ONL' phone Documentation Fo tion of this form. Ma d take place prior to o	orm to this repor Anagement review o	rt). Make note of f Federal and India	BLM status in
5. Changes have listed above.	been entered in the Oi	l and Gas Informat	tion System (Wang/IBM	) for each well
6. Cardex file h	as been updated for ead	ch well listed abo	ve.	
7. Well file lab	els have been updated 1	for each well list	ed above.	
8. Changes have for distribut	been included on the r ion to State Lands and	monthly "Operator, the Tax Commission	Address, and Accoun	t Changes" memo
9. A folder has placed there	been set up for the Op for reference during ro	perator Change fil outing and process	e, and a copy of thi ing of the original d	s page has been ocuments.

ATOR CHANGE WORKSHEET (CONTINUED) Initi each item when completed. Write N/A Clemmis not applicable.
TITY REVIEW
_ 1. (Rule R615-8-7) Entity assignments have been reviewed for all wells listed above. Wer entity changes made? (yes/no) (If entity assignments were changed, attach <u>copies</u> o Form 5, Entity Action Form).
_ 2. State Lands and the Tax Commission have been notified through normal procedures of entity changes.
ND VERIFICATION (Fee wells only)
_ 1. (Rule R615-3-1) The new operator of any fee lease well listed above has furnished a proper bond
_ 3. The former operator has requested a release of liability from their bond (yes/no) Today's date 19 If yes, division response was made by letter dated 19
ASE INTEREST OWNER NOTIFICATION RESPONSIBILITY
1. (Rule R615-2-10) The former operator/lessee of any fee lease well listed above has been notified by letter dated 19, of their responsibility to notify any person with an interest in such lease of the change of operator. Documentation of such notification has been requested.
_ 2. Copies of documents have been sent to State Lands for changes involving State leases.
LMING
1. All attachments to this form have been microfilmed. Date:
LING
_ 1. Copies of all attachments to this form have been filed in each well file.
2. The <u>original</u> of this form and the <u>original</u> attachments have been filed in the Operator Change file.
MMENTS
71/34-35

MIC 40 400

AUG 1 9 1991

Moab District P. O. Box 970 Moab, Utah 84532

DIVISION OF OIL GAS & MINING

Duncan Energy Company 1777 South Harrison Street, Penthouse 1 Denver, Colorado 80210-3925 Alig 16 inci

Re: Application for Permit to Orill Well No. Cave Canyon Federal 3-4 NWNW Sec. 3, T. 38 S., R. 24 E.

San Juan County, Utah

Lease U-47876

Gent lemen:

The Application for Permit to Drill the referenced well was approved on July 31, 1990. Since that date, no known activity has transpired at the approved location.

Applications for permit to drill are effective for a period of one year. In view of the foregoing, this office is rescinding the approval of the referenced application.

Should you intend to drill at this location at a future date, a new application for permit to drill must be submitted.

If you have any questions, please contact the Branch of Fluid Minerals at (801) 259-6111.

Sincerely yours,

Acing Assistant District Manager
Mineral Resources

Lynn Jackson

43-037-31542

Enclosure:

Application for Permit to Urill

cc: SJRA (w/o encl.)

State of Utah, Division of Oil, Gas and Mining (w/o encl.)

Ybutts: vb:6/15/91

Dee C. Hansen
Executive Director
Dianne R. Nielson, Ph.D.
Division Director

355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203 801-538-5340

August 22, 1991

Duncan Energy Company 1777 South Harrison, Penthouse 1 Denver, Colorado 80210-3925

### Gentlemen:

Re: <u>Well No. Cave Canyon Federal #3-4, Sec. 3, T. 38S, R. 24E, San Juan County,</u> Utah, API No. 43-037-31542

In concert with action taken by the U.S. Bureau of Land Management, approval to drill the above referenced well is hereby rescinded. A new Application for Permit to Drill must be filed with this office for approval <u>prior</u> to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division of Oil, Gas and Mining immediately.

Sincerely,

Don Staley

Administrative Supervisor

Oil and Gas

DME/ldc

cc: R.J. Firth

Bureau of Land Management - Moab

Well file

**WOI196**